AGRICULTURE BUSINESS SYSTEMS

JUNIOR & SENIOR INSTRUCTION

Career & Technical Education

Skills for Employment & Lifelong Learning



This document was prepared by:
Office of Career, Technical, and Adult Education
Nevada Department of Education
700 E. Fifth Street
Carson City, NV 89701

Adopted by the State Board of Education / State Board for Occupational Education on December 13, 2003

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ACKNOWLEDGEMENTS

The Agriculture and Natural Resource Science Standards project was drafted and reviewed by Nevada agriculture education instructors. The document was reviewed by the Nevada Agriculture Education Advisory Board that consisted of Secondary Education, Postsecondary Education, Administration, Business and Industry, parents, and students. The Nevada Department of Education and the Agriculture Education Consultant wishes to acknowledge the contributions of those who worked on the development of these standards.

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AGRICULTURE AND NATURAL RESOURCES Program Requirements

Occupations associated with agriculture production, natural resources, processing and distribution of food and fiber are important to the national interests and provide significant employment opportunities. Occupational education and training in agriculture and agri-business are essential to the continued economic health of Nevada and the nation, as it provides the needed competent and trained work force.

The advent of corporate agriculture and decline of the family-operated agriculture venture mandate the maintenance, expansion and improvement of occupational agriculture education. Through agriculture education, students are prepared for employment in the field of agriculture through planning and managing agriculture, food, fiber, and natural resources systems. Production of agricultural commodities, including food fiber, wood products, horticultural crops, and other plant and animal products. Financing, processing, and marketing and distribution of agriculture products; farm production and supply and service industries; horticulture and landscaping services, and the use and conservation of land and water resources; development and maintenance of recreational resources. It also includes mining and extraction operations and related environmental management services. Source: *USDOE/OVAE Brochure*

Agriculture education provides high school students with technical and specialized knowledge in production agriculture and natural resources as well as other specific agriculture occupations. The programs are designed to meet students' occupational objectives, interests, and abilities for entry into chosen occupations and can prepare them for advanced education and training. Agriculture education is a coordinated program of group and individual instructional activities consisting of classroom instruction, laboratory experiences, and leadership development. Integral to these activities are FFA (leadership development) and Supervised Agriculture Experience (work-based learning), Nevada Revised Statute 385.110. Federal/Public Law #105-225 which was passed in August, 1998, states "Congress of the United States, recognizes the importance of the FFA as an integral part of the program of Vocational Agriculture." All students enrolled in Agriculture Education will be recognized as members of the FFA organization. All secondary agriculture education programs and school districts will purchase a curriculum packet consisting of the New Horizons agriculture career and technical magazine, the FFA manual, and the Nevada Record Book on a yearly basis for every student enrolled in agriculture education in their program. Areas of study at the secondary level are divided into Agriculture Science and Specialized Advanced Agriculture Career and Technical Areas.

Agriculture and Society, Plant and Soil Science, Agriculture Mechanical Engineering and Technology, Animal Science, Leadership/FFA, Agriculture Business, Sales, Marketing and Supervised Agriculture Experience, Natural Resources, and Employability are included in the Agriculture Science introduction division.

Instruction in business/specialized agriculture provides training in specific occupational skills, duties, and tasks, as determined by the business and industry needs. Specialized career and technical agriculture programs will include, but are not limited to, the following: ornamental horticulture, floriculture, floral design, turf and landscape management, equine science and technology, forestry technology, wildlife management and enforcement, food science and processing, feedlot management, animal science, veterinary science, agriculture power systems, natural resources and reclamation, mining science and operations, nursery and greenhouse management, landscape architecture, irrigation and chemical management, lawn care and maintenance, and agriculture construction.

NEVADA AGRICULTURE EDUCATION Model of Instruction

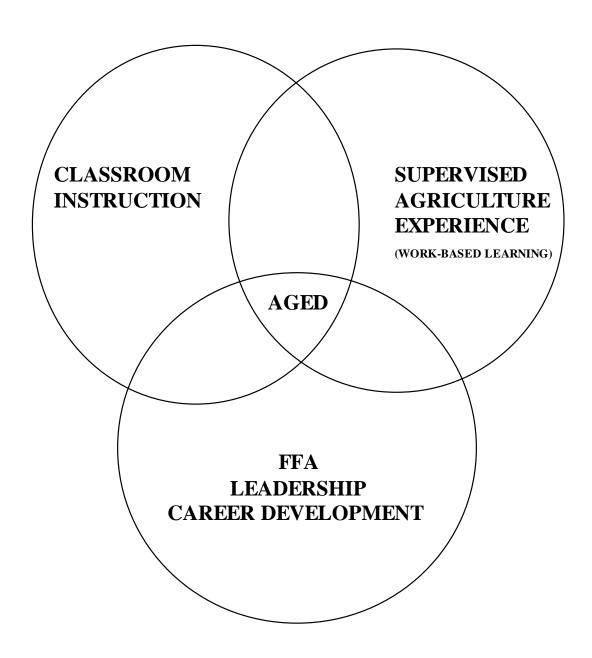


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Agriculture Business Economic Principles

<u>Content Standard 1.0</u>: Students will describe basic economic principles as they relate to agriculture businesses and agriculture.

Performance Standard 1.1	Describe the basic economic factors that affect farm and agriculture business management decisions.
EXCEEDS STANDARD	 Evaluate the impact of government subsidies on production, pricing and international trade. Describe three factors that affect price besides supply and demand. Analyze the future price of a commodity with defined scenarios. Develop strategies to avoid cyclical price fluctuations.
MEETS STANDARD	 1.1.1 Describe how supply and demand affects price. 1.1.2 List factors that shift the supply and demand curve. 1.1.3 Describe the basic beliefs of capitalism. 1.1.4 Distinguish main characteristics of pure competition. 1.1.5 Describe the concepts of utility. 1.1.6 Compare and contrast the economies of scale. 1.1.7 Describe reasons why price cycles occur.
APPROACHES STANDARD	 Define supply and demand. List three basic economic systems. Define capitalism.

Nevada Academic Standards Correlation: English: 2.0, 3.0, 4.0, 6.0, 7.0, 9.0, 10.0, 11.0

Math: 1.0, 2.0, 3.0, 6.0, 7.0

Agriculture Business Economic Principles

<u>Content Standard 1.0</u>: Students will describe basic economic principles as they relate to agriculture businesses and agriculture.

Performance Standard 1.2	Distinguish among supplementary, complementary, competitive and independent enterprises.
EXCEEDS STANDARD	 Develop supplementary and complementary components for their SAE. Evaluate and recommend competitive business opportunities for a given enterprise. Evaluate the potential opportunities for an independent enterprise.
MEETS STANDARD	 1.2.1 Compare and contrast complementary and supplementary enterprises. 1.2.2 Compare and contrast competitive and independent enterprises. 1.2.3 Predict price changes with a change in supplementary products. 1.2.4 Explain the advantages and disadvantages of diversification and specialization.
APPROACHES STANDARD	 Define supplementary enterprises. Define complementary enterprises. Define competitive enterprises. Define independent enterprises.

Nevada Academic Standards Correlation:

English: 2.0, 3.0, 4.0, 6.0, 7.0, 8.0, 9.0, 10.0, 11.0

Math: 1.0, 2.0, 3.0, 4.0, 6.0

Agriculture Business Economic Principles

<u>Content Standard 1.0</u>: Students will describe basic economic principles as they relate to agriculture businesses and agriculture.

Performance Standard 1.3	Use economic decision making tools to increase profitability of an agriculture enterprise.
EXCEEDS STANDARD	 Calculate marginal cost and marginal return for an enterprise. Determine the stage of production that maximizes net return for enterprise. Develop a model to implement profitability concepts in your SAE.
MEETS STANDARD	 1.3.1 Distinguish between fixed and variable cost. 1.3.2 Distinguish between marginal cost and marginal revenue. 1.3.3 Describe the four factors of production.(land, labor, capital and management) 1.3.4 Chart and identify the three stages of production. 1.3.5 Describe the law of diminishing returns and how it relates to costs, production and return on investments.
APPROACHES STANDARD	 Define fixed and variable cost. Define marginal cost and marginal revenue. List the four factors of production. Define the three stages of production. Write the law of diminishing returns.

Nevada Academic Standards Correlation:

English: 2.0, 3.0, 9.0, 10.0, 11.0 Math: 1.0, 2.0, 3.0, 6.0, 7.0

<u>Content Standard 2.0</u>: Students will explain how business ownership structures, organizations, and human resources affect agriculture business management decisions.

Performance Standard 2.1	Students will explain how the different types of business ownership structures impact agriculture enterprises.
EXCEEDS STANDARD	 Evaluate and defend your choice of ownership structure for your SAE. Design a partnership agreement. Evaluate the tax and liability implications of the different ownership structures. Summarize the steps to establish and terminate the various ownership structures.
MEETS STANDARD	 2.1.1 Compare and contrast the different types of ownership structures. 2.1.2 Explain the characteristics and value of cooperatives. 2.1.3 Identify how different business ownerships are taxed. 2.1.4 List the advantages and disadvantages of establishing a franchise. 2.1.5 List the components of a partnership agreement.
APPROACHES STANDARD	 List and define the different types of ownership structures. List five agriculture business corporations.

Nevada Academic Standards Correlation:

English: 2.0, 3.0, 4.0, 6.0, 7.0, 8.0, 9.0, 10.0, 11.0

<u>Content Standard 2.0</u>: Students will explain how business ownership structures, organizations, and human resources affect agriculture business management decisions.

Performance Standard 2.2	Students will explain how the different public/private organizations impact agriculture enterprises.
EXCEEDS STANDARD	 Establish a model to incorporate the use of state and federal agriculture agencies for an agriculture enterprise. Evaluate the benefits of a specific state or federal agriculture program or policy. Evaluate agriculture policy development processes used by cooperative and commodity groups.
MEETS STANDARD	 2.2.1 Explain the importance of agriculture consultants. 2.2.2 Describe the various agriculture cooperatives and commodity groups that formulate agriculture policy. 2.2.3 Explain the role of the major departments within the United States Department of Agriculture. 2.2.4 Explain the role of three primary state and federal agencies involved with Nevada agriculture. 2.2.5 Construct a chart of agencies in the local area including the services they provide.
APPROACHES STANDARD	 List the state agencies that develop policy and regulate agriculture enterprises. List the federal agencies that develop policy and regulate agriculture enterprises. List the cooperatives and commodity groups that influence Nevada agriculture policy.

Nevada Academic Standards Correlation:

English: 2.0, 3.0, 9.0, 10.0, 11.0

<u>Content Standard 2.0</u>: Students will explain how business ownership structures, organizations, and human resources affect agriculture business management decisions.

Performance Standard 2.3	Explain the role of the agriculture business and human resource manager.
EXCEEDS STANDARD	 Prepare a job description for agriculture occupations. Develop an organizational chart for an agriculture business. Develop a reward and disciplinary human resource plan.
MEETS STANDARD	 2.3.1 Describe the functions of organizing, directing, planning, coordinating and controlling an agriculture business. 2.3.2 Describe the different levels of management hierarchy and explain how they relate to one another. 2.3.3 Describe the different styles of effective personnel leadership. 2.3.4 Describe the characteristics of a good manager. 2.3.5 Explain management's role in agriculture safety.
APPROACHES STANDARD	 Explain the role of a manager. List the characteristics of a good manager. List the different styles of personnel leadership. List the four functions of management.

Nevada Academic Standards Correlation:

English: 2.0, 3.0, 9.0, 10.0, 11.0

<u>Content Standard 2.0</u>: Students will explain how business ownership structures, organizations, and human resources affect agriculture business management decisions.

Performance Standard 2.4	Students will explain the role of human resources and its importance to successful agriculture businesses.
EXCEEDS STANDARD	 Evaluate the contribution of employee training to profitability. Evaluate the impact of mandated and optional employee benefits on profitability. Develop a hiring, training, and performance-evaluation system.
MEETS STANDARD	 2.4.1 List five basic human needs that affect how people perform a job. 2.4.2 List and discuss the characteristics of an effective motivation program. 2.4.3 Describe methods of screening and testing potential employees and identify hiring procedures. 2.4.4 Describe forms of employee training. 2.4.5 Explain how employee performance is evaluated. 2.4.6 Explain how compensation and benefit programs are used as motivational tools. 2.4.7 Discuss the impact of collective bargaining on agriculture. 2.4.8 Discuss the economic implications of mandated employee benefits.
APPROACHES STANDARD	 Describe today's diverse workforce. List the mandated employee benefits. List optional employee benefits. List the benefits of employee training, performance benchmarks, and evaluation.

Nevada Academic Standards Correlation: English: 2.0, 3.0, 8.0, 9.0, 10.0, 11.0

Agriculture Business Agriculture Business Accounting

<u>Content Standard 3.0</u>: Students will describe generally accepted accounting principles and establish an accounting system appropriate for their agriculture business.

Performance Standard 3.1	Students will explain and use generally accepted accounting principles to record business transactions.
EXCEEDS STANDARD	 Design and implement an accounting system for a specific agriculture business. Evaluate an existing agriculture business accounting system and make recommendations.
MEETS STANDARD	 3.1.1 Describe the generally accepted accounting principles (GAAP). 3.1.2 Compare and contrast cash and accrual basis accounting system. 3.1.3 Identify and generate the financial reports. 3.1.4 Apply the accounting equation. 3.1.5 Determine current versus non-current liabilities and assets. 3.1.6 Determine how to record transactions based upon the chart of accounts. 3.1.7 Select and use the most favorable depreciation methods.
APPROACHES STANDARD	 Differentiate between bookkeeping and accounting. Describe the role of accounting in making informed decisions. Define debits and credits. Define depreciable and non-depreciable items.

Nevada Academic Standards Correlation: English: 2.0, 3.0, 4.0, 6.0, 7.0, 9.0, 10.0, 11.0

Math: 1.0, 2.0, 3.0, 4.0, 6.0, 7.0

Content Standard 4.0: Students will be able to read and interpret financial reports in order to make informed decisions relating to budgeting, obtaining credit, tax management, and other financial decisions.

Performance Standard 4.1	Students will identify and interpret financial reports and recommend sound financial proposals.
EXCEEDS STANDARD	 Apply ratio analysis to financial statements in a comprehensive evaluation of a company's financial situation. Recommend strategies to improve the financial performance of your SAE.
MEETS STANDARD	 4.1.1 Identify and apply financial analysis ratios. 4.1.2 Interpret the data in the financial reports. 4.1.3 Describe and discuss the objectives of financial analysis. 4.1.4 Describe and discuss the standards of financial analysis. 4.1.5 Differentiate between income statements and balance sheets.
APPROACHES STANDARD	 Define liquidity, solvency, and equity. List the financial reports. Discuss the objectives of financial analysis. Define expenses and income.

Nevada Academic Standards Correlation: English: 2.0, 3.0, 4.0, 9.0, 10.0, 11.0

Math: 1.0, 2.0, 3.0, 6.0, 7.0, 8.0, 9.0

<u>Content Standard 4.0</u>: Students will be able to read and interpret financial reports in order to make informed decisions relating to budgeting, obtaining credit, tax management, and other financial decisions.

Performance Standard 4.2	Students will describe the purposes, benefits and limitations of budgeting and develop a budget for an agriculture business.
EXCEEDS STANDARD	 Prepare two different types of budgets based on past performance and predicted market trends. Develop a plan of financial control to bring actual results in line with a budget.
MEETS STANDARD	 4.2.1 Contrast the uses of the three major types of budgets. 4.2.2 Discuss the role of financial management in the budgeting process. 4.2.3 Evaluate business performance in relation to budget projection. 4.2.4 Explain the basic principles of budgeting. 4.2.5 Arrange in order the steps in developing a budget.
APPROACHES STANDARD	 List the four purposes of budgeting. Describe or define budgets. List the basic principles of budgeting.

Nevada Academic Standards Correlation: English: 2.0, 3.0, 4.0, 6.0, 7.0, 9.0,10.0, 11.0 Math: 1.0, 3.0, 4.0, 5.0, 6.0, 7.0, 8.0, 9.0

Content Standard 4.0: Students will be able to read and interpret financial reports in order to make informed decisions relating to budgeting, obtaining credit, tax management, and other financial decisions.

Performance Standard 4.3	Students will describe and explain the role of credit in agriculture business.
EXCEEDS STANDARD	 Compare the actual cost of different types of credit. Evaluate the varied services provided by financial institutions. Evaluate the benefits of lease versus purchase. Complete a credit application and related documents to obtain credit that will benefit a SAE.
MEETS STANDARD	 4.3.1 Discuss the role of credit in agriculture. 4.3.2 Define two specific kinds of credit. 4.3.3 Explain three fundamentals of credit. 4.3.4 Complete an amortization schedule for a specified amount and term. 4.3.5 Discuss factors that affect the cost of credit. 4.3.6 Define components of credit worthiness. 4.3.7 Discuss the components of a positive credit profile. 4.3.8 Compare and contrast the services provided by agriculture lenders.
APPROACHES STANDARD	 List factors that affect the cost of credit. Define interest rate, interest, and principal. List sources of agriculture credit.

Nevada Academic Standards Correlation: English: 2.0, 3.0, 4.0, 6.0, 7.0, 9.0, 10.0, 11.0

Math: 1.0, 2.0, 3.0, 5.0, 6.0, 8.0, 9.0

Content Standard 4.0: Students will be able to read and interpret financial reports in order to make informed decisions relating to budgeting, obtaining credit, tax management, and other financial decisions.

Performance Standard 4.4	Students will describe types of taxes, the reasons for tax planning and general factors important to understanding tax management.
EXCEEDS STANDARD	 Complete a Schedule F federal tax form and transfer information to form 1040. Select tax preparation software and utilize that product to prepare tax return. Develop a tax management plan for a given enterprise that minimizes tax liability.
MEETS STANDARD	 4.4.1 Describe the purposes and importance of tax planning including business ownership type. 4.4.2 Distinguish between deductible and non-deductible expenses. 4.4.3 Describe the influence of depreciation on income taxes. 4.4.4 Describe the options available for tax accounting periods for various ownership types. 4.4.5 Compare and contrast accrual versus cash basis accounting relating to tax liabilities.
APPROACHES STANDARD	 Match the types of taxes to their description. List various types of tax credits. List deductible business expenses. Define depreciation.

Nevada Academic Standards Correlation: English: 2.0, 3.0, 4.0, 6.0, 7.0, 9.0, 10.0, 11.0

Math: 3.0, 6.0, 9.0

Agriculture Business Agriculture Records

<u>Content Standard 5.0</u>: Students will explain the importance of establishing and maintaining an efficient record-keeping system to comply with government regulations and aid in decision-making.

Performance Standard 5.1	Students will identify government-mandated reports and establish information collection and retrieval systems to facilitate completion of those reports.
EXCEEDS STANDARD	 Select software that can be used to establish a database of information to complete reports. Complete government reports for an agriculture enterprise.
MEETS STANDARD	 5.1.1 Examine the importance of a data collection system that aids in the development of government reports. 5.1.2 Discuss four county, state, or federal mandated reports. 5.1.3 Explore reporting requirements for agriculture business on the USDA Web page. 5.1.4 Investigate possible data collection systems that aid in reporting to county, state, and federal agencies.
APPROACHES STANDARD	 List four county, state, or federal reports required of an agriculture business. Describe how the information contained in reports is used by the requesting agencies.

Nevada Academic Standards Correlation:

English: 2.0, 3.0, 9.0, 10.0, 11.0

Agriculture Business Agriculture Records

<u>Content Standard 5.0</u>: Students will explain the importance of establishing and maintaining an efficient record-keeping system to comply with government regulations and aid in decision-making.

Performance Standard 5.2	Students will complete and explain the importance of production reports used in planning and analyzing performance in agriculture business.
EXCEEDS STANDARD	Evaluate an agriculture enterprise performance based upon industry production data and recommend changes to improve performance.
MEETS STANDARD	 5.2 Explain the importance of equipment maintenance records. 5.3 Explain the importance of production agriculture records. 5.4 Select, develop, and maintain a data collection system to prepare production reports. 5.5 Compare and contrast industry production data to a similar agriculture enterprise.
APPROACHES STANDARD	 List production data used for a local agriculture enterprise. Describe equipment maintenance records. Describe production agriculture records.

Nevada Academic Standards Correlation:

English: 2.0, 3.0, 4.0, 6.0, 7.0, 8.0, 9.0, 10.0, 11.0

Math: 1.0, 3.0, 5.0, 6.0, 7.0, 9.0

Agriculture Business Law/Risk Management

<u>Content Standard 6.0</u>: Students will identify the major principles of law and risk management as applied to agriculture enterprises.

Performance Standard 6.1	Students will explain the major principles of law as applied to agriculture businesses.
EXCEEDS STANDARD	 Assess the impact of a specific agriculture law. Design a flow chart illustrating the formulation, adoption, and enforcement of an agriculture law.
MEETS STANDARD	 6.1.1 Identify major farm laws and their purposes. 6.1.2 Discuss the characteristics of liability laws as they relate to agriculture. 6.1.3 Discuss the characteristics of contract laws as they relate to agriculture. 6.1.4 Describe the property and water right laws applicable to agriculture landowners. 6.1.5 Explain how local, state, and federal regulations affect agriculture business operations and planning. 6.1.6 Explain the sources of agriculture law including lawmaking bodies, courts, customs and administrative rules.
APPROACHES STANDARD	 List agencies that implement agriculture regulation. List three agriculture laws that affect a local agriculture enterprise.

Nevada Academic Standards Correlation:

English: 2.0, 3.0, 9.0, 10.0, 11.0

Agriculture Business Law/Risk Management

<u>Content Standard 6.0</u>: Students will identify the major principles of law and risk management as applied to agriculture enterprises.

Performance Standard 6.2	Students will explain methods of risk management practices for agriculture businesses.
EXCEEDS STANDARD	 Develop a risk management plan using multiple risk management strategies. Evaluate an agriculture enterprise and recommend diversification opportunities. Participate in reality-based risk management training.
MEETS STANDARD	 6.2.1 Define the types of risks involved with production agriculture including production, price, casualty, human, legal, political, economic, and obsolescence risk. 6.2.2 Identify and describe four basic strategies of risk management. 6.2.3 Explain how financial risk can be mitigated by maintaining credit reserves. 6.2.4 Identify and describe the various types of agriculture insurance. 6.2.5 Explain how diversification can be used to reduce risk in agriculture. 6.2.6 Discuss how business ownership structure affects personal risk.
APPROACHES STANDARD	 List four basic strategies of risk management. Define insurance. List the types of risks associated with production agriculture.

Nevada Academic Standards Correlation: English: 2.0, 3.0, 8.0, 9.0, 10.0, 11.0

Math: 1.0, 2.0, 3.0, 6.0

Agriculture Business Agriculture Marketing, Sales, and Trade

<u>Content Standard 7.0</u>: Students will describe the principles of marketing and selling of agriculture products and apply this knowledge using simulations and career development events.

Performance Standard 7.1	Students will describe and simulate marketing strategies involved with agriculture products and services.
EXCEEDS STANDARD	 Develop a marketing plan for an agriculture product or service. Chart the progress of an agriculture product from producer to consumer. Evaluate the strengths and weaknesses of a given agriculture product or service and recommend marketing strategies. Participate in the Marketing Plan Career Development Event.
MEETS STANDARD	 7.1.1 Describe types of markets. 7.1.2 Describe key factors involved in marketing. 7.1.3 Describe how value added strategies enhance the value of agriculture products. 7.1.4 Explain the steps to conduct a market analysis. 7.1.5 Explain how grading standards affect the price of agriculture products. 7.1.6 Describe how product, price, place, and promotion (4 P's) affect agriculture marketing.
APPROACHES STANDARD	 List the employment opportunities involved in marketing. Define a free enterprise system. Define marketing. List the 4 P's of marketing.

Nevada Academic Standards Correlation: English: 2.0, 3.0, 4.0, 8.0, 9.0, 10.0, 11.0

Math: 1.0, 2.0, 3.0, 6.0

Agriculture Business Agriculture Marketing, Sales, and Trade

<u>Content Standard 7.0</u>: Students will describe the principles of marketing and selling of agriculture products and apply this knowledge using simulations and career development events.

Performance Standard 7.2	Students will describe and simulate buying and selling strategies involved with agriculture products and services.
EXCEEDS STANDARD	 Participate in a role-playing sales presentation of an agriculture product or service. Demonstrate effective handling of customer objections in a role-playing situation. Participate in the Agriculture Sales and Service Career Development Event at any level.
MEETS STANDARD	 7.2.1 Describe the basic function of selling in agriculture. 7.2.2 Discuss what motivates people to buy. 7.2.3 Describe the buying steps of an agriculture product or service. 7.2.4 Explain the steps in the selling process. 7.2.5 Explain the influence of cooperatives on the returns to the producer. 7.2.6 Select appropriate questions and methods for determining a customer's wants or needs. 7.2.7 Explain how demand for a product influences price.
APPROACHES STANDARD	 List the steps in the selling process. List the steps in the buying process. Define agriculture selling. List the factors that influence buyer motivation.

Nevada Academic Standards Correlation: English: 2.0, 3.0, 8.0, 9.0, 10.0, 11.0

Math: 1.0, 2.0, 6.0

Agriculture Business Agriculture Marketing, Sales, and Trade

<u>Content Standard 7.0</u>: Students will describe the principles of marketing and selling of agriculture products and apply this knowledge using simulations and career development events.

Performance Standard 7.3	Students will explain the interrelationships of governmental, economic, and cultural factors affecting local, national, and international trade.
EXCEEDS STANDARD	 Chart the process of becoming an international trader. Prepare a report on a major international trade agreement that influences the marketing of an agriculture product. Research and develop a presentation about US agriculture products that have a comparative advantage.
MEETS STANDARD	 7.3.1 Describe the basic principles underlying the international agriculture market. 7.3.2 Compare and contrast the trade policies of the US and other important trading partners. 7.3.3 Discuss the impact of local cultures on agriculture sales in international markets. 7.3.4 Discuss the influence of world trade organizations and agreements. 7.3.5 Compare and contrast the marketing systems of the US and other international trade partners. 7.3.6 Discuss the United States top ten agriculture imports and exports and their contribution to the Gross National Product. 7.3.7 Discuss the principles of comparative advantage.
APPROACHES STANDARD	 Discuss importing and exporting agriculture products. Define exports and imports. Explain the importance of international trade.

Nevada Academic Standards Correlation:

English: 2.0, 3.0, 4.0, 6.0, 7.0, 8.0, 9.0, 10.0, 11.0

Math: 1.0, 2.0, 3.0, 6.0

Agriculture Business Computer/Technology Utilization

<u>Content Standard 8.0</u>: Students will use technology and information technology for agriculture business improvement.

Performance Standard 8.1	Students will explain and utilize computer technology to support strategies for agriculture business improvement.
EXCEEDS STANDARD	 Evaluate the suitability of a software product for a particular use. Develop a specific application using off-the-shelf software. Research and recommend computer hardware and software application enhancements for a given agriculture business. Prepare a multimedia presentation related to an agriculture business.
MEETS STANDARD	 8.1.1 Explain factors to consider before purchasing a computer for an agriculture business. 8.1.2 Discuss examples of software available for use in agriculture. 8.1.3 Demonstrate the skills necessary to use available accounting, budgeting, and record-keeping software. 8.1.4 Select computer hardware and software applications that meet the needs of an agriculture business.
APPROACHES STANDARD	 List examples of software available for use in agriculture. List five uses of a computer in an agriculture business. Explain the difference between software and hardware.

Nevada Academic Standards Correlation: English: 2.0, 3.0, 8.0, 9.0, 10.0, 11.0

Agriculture Business Computer/Technology Utilization

<u>Content Standard 8.0</u>: Students will use technology and information technology for agriculture business improvement.

Performance Standard 8.2	Students will explain and utilize technology to support strategies for agriculture business improvement.
EXCEEDS STANDARD	 Select and use two forms of available technology in their SAE. Conduct research and report on emerging technology in a developmental stage. Chart the steps required for the adoption of emerging technology. Evaluate economic implications of an agriculture product that has been biologically enhanced.
MEETS STANDARD	 8.2.1 Discuss the importance of available technology in agriculture marketing. 8.2.2 Discuss the importance of available technology in producing agriculture products. 8.2.3 Discuss the ethical questions that arise from applying emerging technology. 8.2.4 Discuss the importance of available technology in analyzing agriculture production levels. 8.2.5 Describe how agriculture technology has advanced in the last century. 8.2.6 Describe the role of the government in supporting research and development of the emerging technology in agriculture.
APPROACHES STANDARD	 List ten examples of available technology used in agriculture. List ethical questions that arise from applying emerging technology. List agriculture products that have been biologically enhanced.

Nevada Academic Standards Correlation: English: 2.0, 3.0, 8.0, 9.0, 10.0, 11.0

Agriculture Business Supervised Agriculture Experience

Content Standard 9.0: Students will explain the relationship between a Supervised Agriculture Experience (SAE) and their preparation for a career in agriculture business.

Performance Standard 9.1	Students will actively engage in and manage an SAE, which enables them to develop work-based skills.
EXCEEDS STANDARD	 Qualify for the Silver State FFA Degree. Develop a career plan for accomplishing occupational objectives.
MEETS STANDARD	 9.1.1 Identify and describe a career interest in agriculture business or related occupation. 9.1.2 Actively participate in and manage an individual SAE. 9.1.3 Keep accurate records as prescribed by the Nevada State FFA policies and procedures. 9.1.4 Show progress with individual achievement and growth in a SAE.
APPROACHES STANDARD	 Define SAE. Plan an individual SAE. Differentiate between the types of SAE.

Nevada Academic Standards Correlation: Not Applicable

Agriculture Business Leadership/FFA

<u>Content Standard 10.0</u>: Students will recognize the importance of leadership skills including interpersonal relations, group management, and communication.

Performance Standard 10.1 EXCEEDS STANDARD	 Students will recognize the traits of effective leaders and participate in leadership training through involved participation in the FFA. Apply for an office. Perform a speech for six to eight minutes on an agriculture business-related topic. Serve on or chair a standing committee. Demonstrate ten procedures of Parliamentary Law. Participate in a Career Development Event above the local level.
MEETS STANDARD	 10.1.1 Recognize opportunities in high wage, high skill agriculture business careers. 10.1.2 Demonstrate appropriate attitudes and behaviors for effective leadership. 10.1.3 Describe the types of individuals who emerge as a group's leader. 10.1.4 Explain the importance of verbal and nonverbal communication skills in leadership. 10.1.5 Select qualities of an effective leader. 10.1.6 Describe technical leadership qualities and skills.
APPROACHES STANDARD	 Identify opportunities in high wage, high skill agriculture business careers. Identify technical leadership qualities and skills. Explain the qualities of a good leader. Differentiate between verbal and nonverbal communication skills in leadership.

Nevada Academic Standards Correlation: English: 4.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0, 11.0

<u>Content Standard 11.0</u>: Students shall achieve competence in workplace readiness, career development, and lifelong learning.

Performance Standard 11.1	Students shall demonstrate problem-solving skills.	
EXCEEDS STANDARD	 Solve three problems using the seven steps of problem solving. Incorporate problem-solving skills through a Career Development Event in FFA. 	
MEETS STANDARD	 11.1.1 List and describe the seven steps to problem solving. 11.1.2 Identify leadership styles used in problem solving. 11.1.3 Demonstrate brainstorming techniques. 11.1.4 Examine and explain the advantages and disadvantages of alternative solutions to one or more problems. 11.1.5 Create an action plan based upon a solution to a work-related problem. 11.1.6 Identify the benefits of solving a work-related problem. 	
APPROACHES STANDARDS	Explain the importance of problem solving.	

Nevada Academic Standards Correlation: English: 3.0, 4.0, 5.0, 6.0, 7.0, 10.0

<u>Content Standard 11.0</u>: Students shall achieve competence in workplace readiness, career development, and lifelong learning.

Performance Standard 11.2	Students shall demonstrate critical-thinking skills.
EXCEEDS STANDARD	 Demonstrate critical-thinking skills in a Career Development Event. Demonstrate the skills necessary to identify, analyze, and offer solutions for agriculture business issues. Formulate, implement, and evaluate an action plan.
MEETS STANDARD	 11.2.1 Demonstrate critical-thinking skill through the planning and implementation of their SAE program. 11.2.2 List and describe the skills necessary to identify, analyze, and offer solutions for agriculture business issues. 11.2.3 Use critical-thinking processes to support solving problems and making decisions. 11.2.4 Demonstrate critical-thinking skills necessary in the workplace. 11.2.5 Explain how emotional thinking and logical thinking affect decision-making in the workplace. 11.2.6 Explain the difference between reliable and unreliable observations and statements of facts. 11.2.7 Recognize patterns or relationships through observation and discovery.
APPROACHES STANDARD	• Identify the importance of critical-thinking skills in identifying, analyzing, and offering solutions for agriculture business issues.

Nevada Academic Standards Correlation:

English: 3.0, 6.0, 11.0

<u>Content Standard 11.0</u>: Students shall achieve competence in workplace readiness, career development, and lifelong learning.

Performance Standard 11.3	Students shall demonstrate the ability to speak, write, and listen effectively.	
EXCEEDS	• Identify ways to adapt their communication style to that of others.	
STANDARD	Describe and use techniques to improve listening, reading,	
	writing, speaking, and nonverbal communication skills.	
	• Explain assertive communication.	
MEETS	11.3.1 Recognize and overcome communication barriers.	
STANDARD	11.3.2 Describe characteristics of four communication styles.	
STANDARD	11.3.3 Discuss the importance of self-communication and	
	interpersonal communication.	
	11.3.4 Identify, research, prepare, and present an agriculture	
	business-related speech.	
	11.3.5 Explain the benefits of effective communication skills in	
	the workplace.	
	11.3.6 Effectively interpret and respond to verbal and nonverbal	
	messages.	
	11.3.7 Demonstrate proper telephone etiquette.	
	11.3.8 Effectively communicate thoughts, ideas, and information	
	in writing.	
	11.3.9 Organize ideas and communicate orally; is able to	
	effectively demonstrate job skills to others.	
	11.3.10 Locate, understand, and interpret written information in	
	documents such as manuals, graphs, and schedules.	
	11.3.11 Select and utilize an appropriate medium for conveying	
	messages with dignity and respect.	
	11.3.12 Organize information into the appropriate format in	
	accordance with standard practices, which includes	
	prewriting, drafting, proofreading, editing/revising, and	
	preparing a final copy.	
	11.3.13 Demonstrate sensitivity to cultural diversity in	
	communication.	
	11.3.14 Identify common communication barriers and methods	
	for improving communication.	
APPROACHES	Define communications.	
STANDARD	Explain the relationship between communication and	
	leadership.	
	• Explain the purpose of communication.	
	Explain the communication process.	

Nevada Academic Standards Correlation: English: 2.0, 4.0, 5.0, 6.0, 7.0, 9.0, 10.0, 11.0

<u>Content Standard 11.0</u>: Students shall achieve competence in workplace readiness, career development, and lifelong learning.

Performance Standard 11.4	Students shall demonstrate the ability to select, apply, and maintain appropriate technology.	
EXCEEDS STANDARD	 Complete a computer-based application for an FFA awards program. Complete a computer-based record book program. Conduct agriculture research using print, multimedia, and Internet resources and use graphs, charts, and/or diagrams to describe trends related to the topic. 	
MEETS STANDARD	 11.4.1 Operate a database program as it relates to agriculture business. 11.4.2 Operate a spreadsheet application related to agriculture business. 11.4.3 Operate a word-processing program. 11.4.4 Construct a multimedia presentation. 11.4.5 Access and demonstrate use of the Internet by accessing and exploring the Nevada State Agriculture Web site and related agriculture business sites. 11.4.6 Demonstrate ability to utilize basic keyboarding techniques. 11.4.7 Demonstrate ability to utilize other input devices. 11.4.8 Demonstrate ability to utilize various electronic research methods. 11.4.9 Demonstrate knowledge of the basic technology systems currently available and how they apply to your field. 11.4.10 Investigate and explain the use, benefits, and costs of technological developments in the workplace and school. 11.4.11 Identify and demonstrate the appropriate use of technology to enhance the efficiency of the workplace and school. 11.4.12 Demonstrate routine maintenance and repair of technological equipment. 	
APPROACHES STANDARD	 Recognize the importance of information technology in agriculture. List and describe the types of applications used in information technology. 	

Nevada Academic Standards Correlation:

English: 8.0, 9.0, 10.0, 11.0

<u>Content Standard 11.0</u>: Students shall achieve competence in workplace readiness, career development, and lifelong learning.

Performance Standard 11.5	Students shall demonstrate leadership and teamwork skills.	
EXCEEDS STANDARD	 Demonstrate ten procedures of parliamentary law. Lead a group discussion. Analyze five stages of group development. 	
MEETS STANDARD	 11.5.1 Participate in a group-panel discussion. 11.5.2 Participate in one of the seven FFA leadership development conferences. 11.5.3 Demonstrate five procedures of parliamentary law. 11.5.4 Participate in planning and conducting at least three official functions in the FFA Chapter Program of Activities. 11.5.5 Explain the importance of democratic group leadership. 11.5.6 Describe the characteristics of functional, task, and informal groups. 11.5.7 Work cooperatively with others when given a group project. 11.5.8 Explain traits necessary to effectively lead and influence individuals and groups. 11.5.9 Demonstrate appropriate attitudes and behaviors for effective leadership. 11.5.10 Demonstrate respect for team members, team processes, and team goals. 11.5.11 Participate in the implementation of a group's decision and evaluate the results. 11.5.12 Demonstrate the qualities of an effective leader and team member. 11.5.13 Describe the importance of a proper dress code. 	
APPROACHES STANDARD	 Explain the importance of groups. Explain how to organize groups. Participate in FFA activities at the local level. 	

Nevada Academic Standards Correlation:

<u>Content Standard 11.0</u>: Students shall achieve competence in workplace readiness, career development, and lifelong learning.

Performance Standard 11.6	Students shall demonstrate sound workplace ethics.
EXCEEDS	Model the eleven points of FFA Code of Ethics while
STANDARD	participating in school, community, or FFA activities.
MEETS	11.6.1 Identify and understand the eleven points to the FFA
STANDARD	code of Ethics.
	11.6.2 Develop personal work ethics through participation in their SAE.
	11.6.3 Discuss the importance of ethics practiced in the workplace.
	11.6.4 Develop personal work ethics through work experience.
	11.6.5 Describe the importance of ethics practiced in the workplace.
	11.6.6 Demonstrate regular attendance, promptness, and the willingness to follow instructions and complete an assigned task.
	11.6.7 Demonstrate appropriate personal and professional attitudes and behaviors.
	11.6.8 Maintain a safe, clean, and organized work area.11.6.9 Demonstrate awareness of legal responsibilities related to individual performance, safety, and customer satisfaction.
	11.6.10 Demonstrate knowledge of various types of harassment.
APPROACHES STANDARD	List the important ethics in the workplace.

Nevada Academic Standards Correlation:

English:--

<u>Content Standard 11.0</u>: Students shall achieve competence in workplace readiness, career development, and lifelong learning.

Performance Standard 11.7	Students shall demonstrate the ability to effectively manage resources in high-performance workplaces.
EXCEEDS STANDARD	 Discuss the factors that affect the development of resources in high-performance workplaces. Hold an office or position in the agriculture business or FFA program.
MEETS STANDARD	 11.7.1 Identify the important resources needed in a workplace. 11.7.2 Develop skills in evaluating themselves and others in a workplace environment. 11.7.3 Discuss the importance of managing resources in high-performance workplaces. 11.7.4 Identify and organize the human resources needed to complete a job assignment. 11.7.5 Identify and organize the material resources and space requirements needed to complete a job assignment. 11.7.6 Effectively use the highest available technology to complete a job assignment. 11.7.7 Demonstrate cooperation and leadership in a team at school or in a workplace setting. 11.7.8 Use the basic components of effective time management. 11.7.9 Recognize the need for management skills in the workplace with regard to stress, anger management, and substance abuse. 11.7.10 Estimate costs and prepare a detailed work order for an agriculture business. 11.7.11 Develop a time schedule and prioritized task list to complete a job assignment.
APPROACHES STANDARD	 Define "high-performance workplace." Discuss the ingredients and resources included in managing resources in high-performance workplaces.

Nevada Academic Standards Correlation:

<u>Content Standard 11.0</u>: Students shall achieve competence in workplace readiness, career development, and lifelong learning.

Performance Standard 11.8	Students shall demonstrate career planning and development skills.
EXCEEDS STANDARD	 Develop a plan to match careers with their personal characteristics. Utilize the resources found in the Career Information System to describe careers in an agriculture business. Construct a career portfolio. Participate in a job interview.
MEETS STANDARD	 11.8.1 Develop an employment resume. 11.8.2 Complete a sample job application. 11.8.3 Undergo a mock employment interview. 11.8.4 Demonstrate career planning through the development of their SAE. 11.8.5 Prepare a job application and personal resume. 11.8.6 Complete a personal aptitude and interest inventory. 11.8.7 Establish short-term and long-term career goals. 11.8.8 Use the Nevada Career Information System or a similar computer-based program to research careers in a chosen field. 11.8.9 Participate in an organized job-shadowing and community service activity.
APPROACHES STANDARD	 Differentiate between work, job, occupation, and career. Explain the diversity of agriculture education job placement. List sources used in finding employment.

Nevada Academic Standards Correlation:

<u>Content Standard 11.0</u>: Students shall achieve competence in workplace readiness, career development, and lifelong learning.

Performance Standard 11.9	Students shall demonstrate job-retention and lifelong-learning skills.	
EXCEEDS STANDARD	 Discuss how to merit employment promotions. Develop a portfolio based on participation in SAE and leadership activities. Participate in a school-based enterprise. Maintain an employment/career portfolio. 	
MEETS STANDARD	 11.9.1 Identify and develop employability skills. 11.9.2 Discuss and develop employable personal management skills. 11.9.3 Discuss and develop employable academic and technical skills. 11.9.4 Identify strategies for balancing work and family roles. 11.9.5 Demonstrate understanding of the need for lifelong learning in a rapidly changing job market. 11.9.6 Identify strategies to maintain employment in the face of job reductions. 11.9.7 Develop long-term career planning strategies. 11.9.8 Identify various educational options needed for job advancement. 11.9.9 Demonstrate interpersonal skills needed for job retention. 11.9.10 Identify and model sound workplace ethics, such as loyalty, punctuality, and initiative. 	
APPROACHES STANDARD	 Explain the importance of positive response to authority. Explain the proper procedure for leaving employment. 	

Nevada Academic Standards Correlation:

Crosswalk of Agriculture Business Systems and Mathematical Academic Standards

Performance Indicators	Mathematical Academic Standards
1.2.3, 1.3.5, 3.1.2, 3.1.3, 3.1.4, 4.1.1,	1.12.1 Calculate and estimate sums, differences, products, quotients,
4.1.2, 4.2.3, 4.3.4, 5.2.3, 5.2.4, 6.2.3,	powers, and roots using mental math, formulas, and algorithms.
6.2.5, 7.1.3, 7.1.5, 7.2.5, 7.1.7, 7.2.7, 7.3.6	
1.1.1, 1.2.3, 1.3.5, 3.1.3, 3.1.4, 3.1.7,	1.12.3 Apply the properties and theories of the real number system to
4.1.1, 4.1.2, 4.2.3, 6.2.3, 6.2.5, 7.1.3,	everyday situations.
7.1.5, 7.2.7, 7.3.6	Croffday Situations.
1.1.1, 1.1.2, 1.1.5, 1.1.7, 1.2.3, 1.3.5,	2.12.2 Represent and solve problems using discrete structures
3.1.3, 3.1.4, 4.1.1, 6.2.3, 6.2.5, 7.1.3,	including graphs and matrices, with and without technology.
7.1.5, 7.2.5, 7.2.7, 7.3.6	including graphs and matrices, with and without technology.
3.1.3, 3.1.4, 3.1.7, 4.1.1, 4.2.3	2.12.3 Create and use different forms of a variety of equations,
3.1.3, 3.1.4, 3.1.7, 4.1.1, 4.2.3	proportions, and/or formulas (e.g., I=PRT or R=I/PT), solving for the
	needed variable as necessary in given situations.
4.1.1	2.12.4 Add, subtract, multiply, and factor (1 st and 2 nd degree)
4.1.1	
	polynomials, describing each step in the process and the connection
	between the algebraic process and the arithmetic process; use simple
	quadratic equations with integer roots to solve practical and
111 110 100 107 010 011	mathematical problems.
1.1.1, 1.1.2, 1.2.3, 1.3.5, 3.1.3, 3.1.4,	2.12.5 Model practical problems from everyday situations with a
3.1.7, 4.3.4, 6.2.3, 6.2.5, 7.1.3, 7.1.5,	variety of models that includes matrices, translating among tabular,
7.2.5, 7.2.7, 7.3.6	symbolic and graphical representations of functions, with and without
	technology.
3.1.1, 3.1.2, 4.2.3, 5.2.4	3.12.1 Convert between customary and metric systems; convert
	among monetary systems.
1.1.1, 1.1.7, 1.2.3, 1.3.5, 3.1.1, 3.1.3,	3.12.2 Select and use measurement tools, techniques, and formulas to
3.1.4, 3.1.7, 4.1.1, 4.2.3, 4.4.5, 5.2.4,	calculate and compare rates, cost, distances, interest, temperatures,
6.2.3, 6.2.5, 7.1.3, 7.1.5, 7.3.6	and weight/mass.
1.1.1, 1.1.7, 1.2.3, 1.3.5, 3.1.1, 3.1.3,	3.12.3 Use and interpret consumer data (e.g., amortization tables, tax
3.1.4, 3.1.7, 4.3.4, 5.2.3	tables, and compound interest charts) to make informed financial
	decisions related to practical applications such as budget.
1.2.3, 3.1.3, 3.1.4, 3.1.7, 4.2.3	4.12.9 Construct, justify and defend mathematical conclusions using
	logical, sequential, deductive reasoning supported by established
	mathematical principles.
4.2.3, 4.3.4, 5.2.3	5.12.1 Use calculators and computers to create and manipulate tables,
	graphs, and matrices to communicate statistical information; use the
	shape of graphs of normal distributions to compare and analyze
	information.
1.2.3, 4.1.1, 4.2.3, 4.3.4, 5.2.4	6.1 Select, modify, develop, and apply strategies to solve a variety of
	mathematical and practical problems and to investigate and
	understand mathematical concepts.
3.1.3, 3.1.4, 3.1.7, 4.1.1, 4.3.4, 5.2.3	6.2 Apply previous experience and knowledge to new problem-
	solving situations.
1.2.3, 3.1.4, 3.1.7, 4.1.2	6.5 Verify, interpret, and evaluate results with respect to the original
	problem situation, determining an efficient strategy for the given
	situation.
3.1.2, 3.1.7, 5.2.3	6.6 Try more than one strategy when the first strategy proves to be
, ,	unproductive.
3.1.4, 3.1.7, 4.3.4, 5.2.3	6.7 Apply multi-step, integrated, mathematical problem-solving
,,,	strategies, persisting until a solution is found or until it is clear that no
	solution exists.
3.1.4, 3.1.7, 4.1.1	6.9 Generalize solutions and strategies from earlier problems to new
3.1.1, 3.1.7, 7.1.1	problem situations.
4.2.3	6.10 Interpret and solve a variety of mathematical problems by
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Performance Indicators	Mathematical Academic Standards
	paraphrasing, identifying necessary and extraneous information,
	selecting and justifying efficient methods and/or strategies, and
	ensuring the answer is reasonable.
1.1.1, 1.2.3, 4.1.4, 3.1.7	6.11 Apply combinations of proven strategies and previous
	knowledge to solve non-routine problems.
3.1.4, 3.1.3, 3.1.7, 4.1.1, 4.2.3, 4.3.4,	6.13 Use technology, including calculators, to solve problems and
4.4.5, 5.2.3	verify solutions
1.2.3, 1.3.5, 3.1.3, 3.1.4, 3.1.7, 6.2.3,	6.14 Use technology, including calculators, to investigate, define, and
6.2.5, 7.1.3, 7.1.5, 7.2.5, 7.2.7, 7.3.6	describe quantitative relationships such as patterns and functions.
5.2.3, 5.2.4	7.2 Use inquiry techniques (e.g., discussion, questioning, research,
	data gathering) to solve mathematical problems.
1.1.1, 3.1.4	7.6 Interpret and solve word problems without the necessity of key
	words or phrases.
1.1.1, 1.1.2, 1.1.5, 1.1.7, 1.3.1, 1.3.2, 1.3.5	7.15 Use everyday language to explain thinking about strategies and
	solutions to mathematical problems.
4.1.2, 4.2.3	7.16 Express mathematical ideas and use them to define, compare,
	and solve problems orally and in writing.
4.1.2, 5.2.3	7.17 Use mathematical notation to communicate and explain
	mathematical situations.
4.1.1, 4.2.3	8.4 Use patterns and relationships to analyze mathematical situations;
	draw logical conclusions about mathematical problems.
4.1.1, 4.3.4	8.11 Determine relevant, irrelevant, and/or sufficient information to
	solve mathematical problems.
4.1.1, 4.1.2, 4.3.4, 4.4.5, 5.2.3, 5.2.4	9.1 Link new concepts to prior knowledge.
4.2.3, 5.2.4	9.2 Use mathematical ideas from one area of mathematics to explain
	an idea from another area of mathematics.
4.1.1, 4.3.4, 5.2.3	9.4 Use the connections among mathematical topics to develop
	multiple approaches to problems.
4.1.1, 4.1.2, 4.2.3	9.6 Use and analyze the connections between Mathematics and other
	disciplines.
4.3.4, 4.4.5, 5.2.3	9.7 Apply mathematical thinking and modeling to solve problems that
	arise in other disciplines (e.g., rhythm in music and motion in
	science).
4.1.1, 4.1.2, 4.2.3, 4.3.4, 4.4.5, 5.2.3, 5.2.4	9.8 Identify, explain, and use mathematics in everyday life.

Crosswalk of Agriculture Business Systems and English Language Arts Academic Standards

Performance Indicators	English Language Arts Academic Standards
1.1.1, 1.1.7, 1.2.1, 1.2.4, 1.3.1, 1.3.5, 2.1.1, 2.1.5,	2.12.1 Refine pre-reading strategies such as accessing prior
2.1.7, 2.2.1, 2.2.5, 2.3.1, 2.3.5, 2.4.1, 2.4.8, 3.1.1,	knowledge, predicting, previewing, and setting a purpose to
4.1.1, 4.1.5, 4.2.1, 4.2.5, 4.3.8, 4.4.1, 4.4.5, 5.1.1,	ensure comprehension.
5.1.4, 5.2.1, 5.2.4, 6.1.1, 6.1.6, 6.2.1, 6.2.6, 7.1.1,	
7.1.6, 7.2.1, 7.2.6, 7.3.1, 7.3.7, 8.1.1, 8.1.4, 8.2.1,	
8.2.6,11.3.1-11.3.14	
1.1.1, 1.1.7, 1.2.1, 1.2.4, 1.3.1, 1.3.5, 2.1.1, 2.1.5,	3.12.4 Use textual evidence to analyze the theme or meaning
2.1.7, 2.2.1, 2.2.5, 2.3.1, 2.3.5, 2.4.1, 2.4.8, 3.1.1,	of a selection.
4.1.1, 4.1.5, 4.2.1, 4.2.5, 4.3.8, 4.4.1, 4.4.5, 5.1.1,	
5.1.4, 5.2.1, 5.2.4, 6.1.1, 6.1.6, 6.2.1, 6.2.6, 7.1.1,	
7.1.6, 7.2.1, 7.2.6, 7.3.1, 7.3.7, 8.1.1, 8.1.4, 8.2.1,	
8.2.6, 11.1.3, 11.1.4, 11.1.6, 11.2.1-11.2.7	
10.1.4, 11.1.3-11.1.6, 11.3.1-11.3.14	4.12.1-4.12.2 Analyze text features and rhetorical strategies of
	different types of primary source documents (e.g., policy
	statements, speeches, debates, diaries, platforms) and identify
1161011000110001	how authors use the features to achieve their purposes.
1.1.6, 1.2.1, 1.2.2, 2.1.1, 3.1.2, 4.2.1, 4.3.8, 4.4.5,	4.12.3 Locate, organize, interpret, and synthesize information
5.2.4, 7.3.2, 7.3.5, 11.1.3-11.1.6, 11.3.1-11.3.14	in multiple primary and secondary sources to support ideas
10.1.4.11.1.4.11.2.1.11.2.4	and positions.
10.1.4, 11.1.4, 11.3.1-11.3.4	4.12.4 Critique the power, logic, reasonableness, and audience
124212214215216217411422	appeal of arguments advanced in texts.
1.2.4, 3.1.3, 3.1.4, 3.1.5, 3.1.6, 3.1.7, 4.1.1, 4.2.3,	4.12.6 Read and apply multi-step directions to perform
4.3.4, 4.3.5, 4.4.4, 7.1.6, 11.3.1-11.3.4	complex procedures and tasks. 5.12.1 Write a research paper that develops a thesis, contains
11.3.4, 11.3.10, 11.3.12	information selected from at least ten sources, and conforms
	to a style manual.
11.3.4, 11.3.10, 11.3.12	5.12.2 Produce subject-specific technical writing, such as
11.5.4, 11.5.10, 11.5.12	instructions for a shop project or field reports for science.
11.1.5, 11.1.4, 11.3.4, 11.3.10, 11.3.12	5.12.3 Write reflective texts that draw comparisons between
11.1.5, 11.1.4, 11.5.4, 11.5.10, 11.5.12	specific incidents and broader themes.
11.1.5, 11.3.4, 11.3.10, 11.3.12	5.12.5 Write summaries or abstracts that distill large amounts
11.1.3, 11.3.1, 11.3.10, 11.3.12	of information into clear, concise prose.
10.1.4, 11.1.5, 11.3.4, 11.3.10, 11.3.12	5.12.6 Write persuasive texts that evaluate, interpret, or
10.11.1, 111.13, 111.31.1, 111.31.10, 111.31.12	speculate using specific rhetorical devices to support
	assertions,; clarify and defend positions with precise and
	relevant evidence.
10.1.4, 11.1.3, 11.1.4, 11.1.5, 11.2.1, 11.2.2,	6.12.1 Generate ideas for writing by selecting appropriate pre-
11.2.3, 11.2.4, 11.2.5, 11.2.6, 11.2.7, 11.3.4,	writing strategies with attention to audience, purpose, and
11.3.10, 11.3.12	personal style.
1.1.6, 1.2.1, 1.2.2, 2.1.1, 3.1.2, 4.2.1, 4.3.8, 4.4.5,	6.12.2 Organize ideas in compositions by selecting and
5.2.4, 7.3.2, 7.3.5, 10.1.4, 11.3.4, 11.3.10, 11.3.12	applying structures such as comparison/contrast or
	cause/effect, which enhance the central idea, theme, or
	purpose.
11.1.3, 11.1.4, 11.1.5, 11.2.1-11.2.7, 11.3.4,	6.12.3 Write compositions that present complex ideas in a
11.3.10, 11.3.12	sustained and compelling manner.
1.1.6, 1.2.1, 1.2.2, 2.1.1, 3.1.2, 4.2.1, 4.3.8, 4.4.5,	6.12.4 Revise writing to improve word choice, organization,
5.2.4, 7.3.2, 7.3.5, 11.1.5, 11.3.12	and point of view, using given criteria such as rubrics or
	feedback from others.
11.1.5, 11.3.12	6.12.5 Edit for use of standard English.
11.1.5, 11.3.12	6.12.7 Share final drafts with a designated audience.
1.1.6, 1.2.1, 1.2.2, 2.1.1, 3.1.2, 4.2.1, 4.3.8, 4.4.5,	7.12.1 Apply the rules of usage, grammar, and capitalization
5.2.4, 7.3.2, 7.3.5, 10.1.4, 11.1.5, 11.3.12	with few significant errors; use modifiers, parallel structure,

Performance Indicators	English Language Arts Academic Standards
	and subordination correctly in writing.
1.1.6, 1.2.1, 1.2.2, 2.1.1, 3.1.2, 4.2.1, 4.3.8, 4.4.5,	7.12.2 Use multiple structures such as inversion, parallelism,
5.2.4, 7.3.2, 7.3.5	and sentences of varying lengths for stylistic effect.
1.1.6, 1.2.1, 1.2.2, 2.1.1, 3.1.2, 4.2.1, 4.3.8, 4.4.5,	7.12.3 Use rules of punctuation; manipulate conventions for
5.2.4, 7.3.2, 7.3.5, 10.1.4, 11.1.5, 11.3.12	emphasis in writing.
1.1.6, 1.2.1, 1.2.2, 2.1.1, 3.1.2, 4.2.1, 4.3.8, 4.4.5,	7.12.4 Use rules of capitalization.
5.2.4, 7.3.2, 7.3.5, 10.1.4, 11.1.5, 11.3.12	1
1.1.6, 1.2.1, 1.2.2, 2.1.1, 3.1.2, 4.2.1, 4.3.8, 4.4.5,	7.12.5 Demonstrate conventional spelling.
5.2.4, 7.3.2, 7.3.5, 11.3.3	
2.4.1, 2.4.2, 2.4.3, 2.4.5, 2.4.6, 10.1.4, 11.4.1,	8.12.1 Summarize and evaluate communications that inform,
11.4.2, 11.4.3, 11.4.4, 11.4.5, 11.4.6, 11.4.7,	persuade, and entertain.
11.4.8, 11.4.9	
1.2.2, 1.2.3, 2.1.1, 5.2.4, 6.2.6, 7.1.6, 7.2.2, 7.2.7,	8.12.2 Create and apply criteria for evaluating content and
7.3.3, 7.3.4, 7.3.6, 7.3.7, 8.1.1, 8.1.2, 8.1.3, 8.2.1,	delivery of oral and multi-media presentations.
8.2.3, 8.2.4, 10.1.4, 11.4.1, 11.4.2, 11.4.3, 11.4.4,	
11.4.5, 11.4.6, 11.4.7, 11.4.8, 11.4.9	
10.1.4	8.12.3 Analyze the effects of language and dialect on
	audience response.
1.1.1, 1.1.7, 1.2.1, 1.2.4, 1.3.1, 1.3.3, 1.3.5, 2.1.1,	9.12.1 Use specific and varied vocabulary and apply standard
2.1.5, 2.2.1, 2.2.4, 2.3.1, 2.3.5, 2.4.3, 2.4.8, 3.1.1,	English to communicate ideas.
3.1.2, 4.1.3, 4.1.4, 4.2.1, 4.2.4, 4.3.1. 4.3.3, 4.3.5,	
4.3.8, 4.4.1, 4.4.5, 5.1.2, 5.2.1, 5.2.2, 5.2.4, 6.1.2,	
6.1.6, 6.2.1, 6.2.6, 7.1.1, 7.1.6, 7.2.1, 7.2.5, 7.2.7,	
7.3.1, 7.3.7, 8.1.1, 8.1.2, 8.2.1, 8.2.6, 10.1.4	
1.1.1, 1.1.3, 1.1.7, 1.2.1, 1.2.2, 1.2.4, 1.3.3, 1.3.5,	9.12.2 Make formal oral or multi-media presentations, using
2.1.1, 2.1.2, 2.2.1, 2.2.4, 2.3.1, 2.3.5, 2.4.3, 2.4.8,	vocabulary and public speaking techniques appropriate to
3.1.1, 3.1.2, 4.1.3, 4.1.4, 4.2.1, 4.2.2, 4.2.4, 4.3.1,	audience and purpose.
4.3.3, 4.3.5, 4.3.8, 4.4.1, 4.4.5, 5.1.2, 5.2.1, 5.2.2,	
5.2.4, 6.1.2, 6.1.6, 7.2.1, 7.2.5, 7.2.7, 7.3.1, 7.3.7,	
8.1.1, 8.1.2, 8.2.1, 8.2.6, 10.1.4, 11.4.1, 11.4.2,	
11.4.3, 11.4.4, 11.4.5, 11.4.6, 11.4.7, 11.4.8,	
11.4.9	
10.1.4, 11.3.2	9.12.3 Organize and deliver planned, extemporaneous, and
	impromptu presentations that address a topic and engage the
	audience.
1.1.1, 1.1.3, 1.1.5, 1.1.7, 1.2.4, 1.3.3, 1.3.5, 2.1.2,	10.12.1 Participate in problem-solving conversations or group
2.2.1, 2.2.4, 2.3.1, 2.3.5, 2.4.3, 2.4.8, 3.1.1, 4.1.3,	discussions by identifying, synthesizing, and evaluating data.
4.1.4, 4.2.2, 4.2.4, 4.3.1, 4.3.3, 4.3.5, 4.3.7, 4.4.1,	
4.4.3, 4.4.4, 5.1.2, 5.2.1, 5.2.2, 6.1.2, 6.1.6, 6.2.3,	
6.2.5, 6.2.6, 7.1.1, 7.1.6, 7.2.1, 7.2.5, 7.2.7, 7.3.1,	
7.3.3, 7.3.4, 7.3.6, 7.3.7, 8.1.1, 8.1.2, 8.2.1, 8.2.2,	
8.2.3, 8.2.4, 8.2.5, 8.2.6, 11.1.1-11.1.6, 11.2.1-	
11.2.7, 11.4.1, 11.4.2, 11.4.3, 11.4.4, 11.4.5,	
11.4.6, 11.4.7, 11.4.8, 11.4.9	
11.1.1-11.1.6, 11.2.1-11.2.7, 11.4.1, 11.4.2,	10.12.2 Negotiate to arrive at consensus by proposing and
11.4.3, 11.4.4, 11.4.5, 11.4.6, 11.4.7	examining possible options.
10.1.4	10.12.3 Identify and practice techniques such as setting time
	limits for speakers and deadlines for decision making to
	improve productivity of group discussions.
10.1.4, 11.1.1-11.1.6, 11.2.1-11.2.7, 11.3.4	10.12.4 Justify a position using logic and refuting opposing
	viewpoints.
11.3.4, 11.4.1, 11.4.2, 11.4.3, 11.4.4, 11.4.5,	11.12.1 Formulate cross-curricular research questions and use
11.4.6, 11.4.7, 11.4.8, 11.4.9	an appropriate research design to gather information.
1.1.1, 1.1.7, 1.2.1, 1.2.4, 1.3.1, 1.3.5, 2.1.1, 2.1.5,	11.12.2 Evaluate possible sources of information for

Performance Indicators	English Language Arts Academic Standards
2.1.7, 2.2.1, 2.2.5, 2.3.1, 2.3.5, 2.4.1, 2.4.8, 3.1.1,	credibility and usefulness.
4.1.1, 4.1.5, 4.2.1, 4.2.5, 4.3.8, 4.4.1, 4.4.5, 5.1.1,	
5.1.4, 5.2.1, 5.2.4, 6.1.1, 6.1.6, 6.2.1, 6.2.6, 7.1.1,	
7.1.6, 7.2.1, 7.2.6, 7.3.1, 7.3.7, 8.1.1, 8.1.4, 8.2.1,	
8.2.6, 11.3.4, 11.4.1, 11.4.2, 11.4.3, 11.4.4,	
11.4.5, 11.4.6, 11.4.7, 11.4.8, 11.4.9	
10.1.4, 11.3.4	11.12.3 Cite sources of information using a standard method
	of documentation.
1.1.6, 1.2.1, 1.2.2, 2.1.1, 3.1.2, 4.3.8, 4.4.5, 5.2.4,	11.12.5 Organize and present research findings using
7.3.2, 7.3.5, 11.3.4, 11.4.1, 11.4.2, 11.4.3, 11.4.4,	appropriate media.
11.4.5, 11.4.6, 11.4.7, 11.4.8, 11.4.9	